

AMENDMENTS TO THE CLAIMS

1-12. (Canceled)

13. (Currently amended) A method of detecting excessive apoptosis in a subject, comprising:

preparing a blood sample from which cells have been removed; and
~~quantifying a reduction in an antigen comprising nucleolin in the sample, to detect excessive apoptosis; reacting an antibody that binds specifically to nucleolin, to detect apoptotic bodies in the blood sample;~~

~~wherein quantifying comprises reacting an antibody with the blood sample detecting high levels of nucleolin correlates with excessive apoptosis.~~

14. (Original) The method of claim 13, wherein the subject is suspected of having a disease selected from the group consisting of Acquired Immunodeficiency Syndrome, a neurodegenerative disease, an ischemic injury, an autoimmune disease, a tumor, a cancer, a viral infection, an acute inflammatory condition and sepsis.

15. (Original) The method of claim 13, wherein the subject is suspected of having cancer.

16. (Original) The method of claim 15, wherein the cancer is selected from the group consisting of endocervical adenocarcinoma, prostatic carcinoma, breast cancer, leukemia and non-small cell lung carcinoma.

17-42. (Canceled.)

43. (Currently amended) The method of claim 42 13, wherein the blood sample comprises is blood, serum, or plasma, tissue, tissue culture medium, or sputum.

44. (Currently amended) The method of claim 42 13, wherein the detecting preparing further comprises disrupting the apoptotic bodies.

45. (Canceled)

46. (Currently amended) The method of claim 42 13, wherein the antibody comprises an anti-nucleolin monoclonal antibody.

47. (Currently amended) The method of claim 46 13, wherein the anti-nucleolin antibody ~~is selected from the group consisting of p7-1A4, sc-8031, sc-9893, sc-9892, 4E2, and 3G4B2 antibodies~~ comprises an anti-nucleolin polyclonal antibody.

48-50. (Canceled)

51. (New) A method of detecting excessive apoptosis in a subject, comprising:
preparing a blood sample from which cells have been removed; and
reacting an antibody that binds specifically to poly(ADP-ribose)
polymerase (PARP-1), to detect apoptotic bodies in the blood sample;
wherein detecting high levels of PARP-1 correlates with excessive
apoptosis.

52. (New) The method of claim 51, wherein the subject is suspected of having a disease selected from the group consisting of Acquired Immunodeficiency Syndrome, a neurodegenerative disease, an ischemic injury, an autoimmune disease, a tumor, a cancer, a viral infection, an acute inflammatory condition and sepsis.

53. (New) The method of claim 51, wherein the subject is suspected of having cancer.

54. (New) The method of claim 51, wherein the cancer is selected from the group consisting of endocervical adenocarcinoma, prostatic carcinoma, breast cancer, leukemia and non-small cell lung carcinoma.

55. (New) The method of claim 51, wherein the blood sample comprises serum or plasma.

56. (New) The method of claim 51, wherein the preparing further comprises disrupting the apoptotic bodies.

57. (New) The method of claim 51, wherein the antibody comprises an anti-PARP-1 monoclonal antibody.

58. (New) The method of claim 51, wherein the antibody comprises an anti-PARP-1 polyclonal antibody.

59. (New) The method of claim 13, wherein the subject is a mammal.

60. (New) The method of claim 13, wherein the subject is a human.

61. (New) The method of claim 51, wherein the subject is a mammal.

62. (New) The method of claim 51, wherein the subject is a human.